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PTO/SB/08A (04-00)

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

## **Complete If Known**

|                        |                  |
|------------------------|------------------|
| Application Number     | 09/809,657       |
| Filing Date            | March 15, 2001   |
| First Named Inventor   | T. W. Hutchens   |
| Group Art Unit         | 1743             |
| Examiner Name          | Not Yet Assigned |
| Attorney Docket Number | HO-P00798USF     |

## **U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | U.S. Patent Document |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document, MM-DD-YYYY | Pages, Columns, Lines, Where Relevant, Passages or Relevant Figures Appear |
|--------------------|-----------------------|----------------------|-----------------------------------|---|---|--|
|                    |                       | Number               | Kind Code <sup>2</sup> (if known) |   |   |  |
|                    | A                     | 3,898,861            |                                   | Parkhurst et al.                                | 07/28/75  |  |
|                    | B                     | 4,022,878            |                                   | Anbar   | 05/10/77  |  |
|                    | C                     | 4,295,048            |                                   | Grüter et al.                                   | 10/13/81  |  |
|                    | D                     | 4,298,332            |                                   | Hill  | 10/20/81  |  |
|                    | E                     | 4,454,233            |                                   | Wang  | 06/12/84  |  |
|                    | F                     | 4,468,468            |                                   | Banninghoven et al.                             | 08/28/84  |  |
|                    | G                     | 4,688,366            |                                   | Stuke   | 08/11/87  |  |
|                    | H                     | 4,694,167            |                                   | Payne et al.                                    | 09/15/87  |  |
|                    | I                     | 4,705,816            |                                   | Andresen et al.                                 | 11/10/87  |  |
|                    | J                     | 4,902,627            |                                   | Kidwell   | 02/20/90  |  |
|                    | K                     | 4,988,879            |                                   | Zare et al.                                     | 01/29/91  |  |
|                    | L                     | 5,003,059            |                                   | Brennan   | 03/28/91  |  |
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|                    | N                     | 5,045,694            |                                   | Beavis et al.                                   | 09/03/91  |  |
|                    | O                     | 5,078,135            |                                   | Capitol et al.                                  | 01/07/92  |  |
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|                    | S                     | 5,547,835            |                                   | Koster  | 08/20/96  |  |

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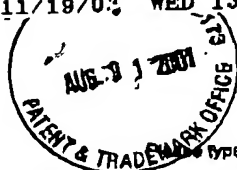
| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document |                     | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document, MM-DD-YYYY | Pages, Columns, Lines, Where Relevant, Passages or Relevant Figures Appear | T <sup>3</sup> |
|--------------------|-----------------------|-------------------------|---------------------|---|---|--|----------------|
|                    |                       | Office <sup>4</sup>     | Number <sup>4</sup> |   |   |  |                |
|                    | T                     | EP                      | 00/84086            | Leybold-Heraeus GmbH                            | 07/27/83  |  | ✓              |
|                    | U                     | EP                      | 03/33912            | Bruker-Franzen Analytik GmbH                    | 08/27/89  |  | ✓              |
|                    | V                     | GB                      | 22/35528            | Finniglin Mat Ltd.                              | 03/06/91  |  | ✓              |
|                    | W                     | GB                      | 22/35529            | Finniglin Mat Ltd.                              | 03/06/91  |  | ✓              |
|                    | X                     | WO                      | 91/02961            | Finniglin Mat Ltd.                              | 03/07/91  |  | ✓              |
|                    | Y                     | GB                      | 22/35184            | Finniglin Mat Ltd.                              | 03/27/91  | NO copy supplied   | ✓              |
|                    | Z                     | WO                      | 92/13829            | Wayne State University                          | 08/21/92  |  | ✓              |
|                    | AA                    | WO                      | 96/3777             | Nelson, Randall W. et al.                       | 11/26/96  |  | ✓              |
|                    | AB                    | WO                      | 96/40888            | Arizona Board of Regents                        | 12/18/96  |  | ✓              |

|                    |           |                 |        |
|--------------------|-----------|-----------------|--------|
| Examiner Signature | Alexander | Date Considered | 2/7/02 |
|--------------------|-----------|-----------------|--------|

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 2

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| Group Art Unit         | N/A              |
| Examiner Name          | Not Yet Assigned |
| Attorney Docket Number | HO-P00798USF     |

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

| Examiner Initials  | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup>         |
|--------------------|-----------------------|---|------------------------|
| A                  | AC                    | KARAS, M. et al. Laser Desorption Ionization of Proteins with Molecular Masses Exceeding 10,000 Daltons, <i>Analytical Chemistry</i> 60:2298-2301 (1988)  | ✓                      |
|                    | AD                    | RIVERA, A. A Summary Statement: Probes for Affinity Mass Spectrometry of Phosphoproteins (April 1994)   | ✓                      |
|                    | AE                    | NELSON, et al. Mass Spectrometric Immunoassay, <i>Analytical Chemistry</i> 67:111:89-102 (1991)   | ✓                      |
|                    | AF                    | BEAVIS, R. et al. Eptaxal Protein Inclusion in Sinapic Acid Crystals, <i>J. Phys. D: Appl. Phys.</i> 26:442-447 (1993)  | ✓                      |
|                    | AG                    | STRUPAT, K. et al. 2,5-Dihydroxybenzoic Acid: A New Matrix for Laser Desorption-ionization Mass Spectrometry; <i>Int'l Journal of Mass Spectrometry and Ion Processes</i> , 111:89-102 (1991)   | ✓                      |
|                    | AH                    | KARAS, M. et al. UV-Laser Desorption/Ionization Mass Spectrometry of Femtomol Amounts of Large Proteins, <i>Biomedical &amp; Environmental Mass Spectrometry</i> 18:841-843 (1989)  | ✓                      |
|                    | AI                    | NELSON, et al. Mass Spec. Analysis of a Transition-metal-binding Peptide Using MALDITOFMS: A Demonstration of Probe Tip Chemistry, <i>Rapid Communications in Mass Spec.</i> 6:4-8 (1992)   | ✓                      |
|                    | AJ                    | DWYER, J. et al., A Novel Sample Preparation Device for MALDI-MS, <i>International Library</i> 13A-13F (1997)   | ✓                      |
|                    | AK                    | American Biotechnology Laboratory, February 1994 cover, cover-page 2 (1994)   | ✓                      |
|                    | AL                    | HILLENKAMP, F., Laser Desorption Mass Spectrometry: Mechanisms Techniques and Applications, <i>Bordeaux Mass Spectrometry Conference Report</i> 11A:354-362 (1988)  | ✓                      |
|                    | AM                    | KARAS, M., Ultraviolet Laser Desorption of Proteins Up to 120,000 Daltons, <i>Bordeaux Mass Spectrometry Conference Report</i> 11A:416-417 (1988)   | ✓                      |
|                    | AN                    | HUTCHENS, T.W. et al., Differences in the Conformational State of a Zinc-finger DNA-binding Protein Domain Occupied by Zinc and Copper Revealed by Electrospray Ionization Mass Spectrometry, <i>Rapid Communications in Mass Spec.</i> 6:468-473 (1992)        | ✓                      |
|                    | AO                    | HUTCHENS, T.W., et al., New Desorption Strategies for the Mass Spectrometric Analysis of Macromolecules, <i>Rapid Communications in Mass Spec.</i> 7:578-580 (1993)   | ✓                      |
|                    | AP                    | XIANG, F., et al., A Method to Increase Contaminant Tolerance in Protein Matrix-assisted Laser Desorption/Ionization by the Fabrication of Thin Protein-doped Polycrystalline Films, <i>Rapid Communications in Mass Spec.</i> 8:199-204 (1994)                 | ✓                      |
|                    | AQ                    | MOCK, K.K. et al., Sample Immobilization Protocols for Matrix-assisted Laser Desorption Mass Spectrometry, <i>Rapid Communications in Mass Spec.</i> 8:233-238 (1994)   | ✓                      |
|                    | AR                    | SPEIR, J.P. et al. Substrate-assisted Laser Desorption of Neutral Peptide Molecules, <i>Analytical Chemistry</i> 64:1041-1045 (1992)  | ✓                      |
|                    | AS                    | YIP, T. et al, Protein Expression and Purification 2:355-362 (1991)   | ✓                      |
|                    | AT                    | Van Breemen et al., Time-Resolved Laser Desorption Mass Spectrometry. I. Desorption of Performed Ions, Elsevier Scientific Publishing Company, <i>International Journal of Mass Spectrometry and Ion Physics</i> 49(1983): 36-51                                | ✓                      |
| No copy supplied   | AU                    | MOCK, K.K. et al. Sample Immobilization Protocols for Matrix-assisted Laser Desorption Mass Spectrometry, <i>Rapid Communications in Mass Spectrometry</i> , Vol. 6, 233-238 (1992)   | ✓                      |
|                    | AV                    | JONSSON, Gunnar P., et al., Plasma Desorption Mass Spectrometry of Peptides and Proteins Adsorbed on Nitrocellulose, <i>Analytical Chemistry</i> , 68:1084-1087 (1988)  | ✓                      |
| Examiner Signature | Alexander             |   | Date Considered 2/7/01 |

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup>Unique citation designation number. <sup>3</sup>Applicant is to place a check mark here if English language Translation is attached

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